PTO/SB/21 (04-04)

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(to be used for all correspondence after initial filing)

| Application Number | 10/619,954 |
|------------------------|---------------|
| Filing Date | 7/15/2003 |
| First Named Inventor | Perozo et al. |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | MP0796 |

| Total Number of Pages | s in This Submission | | Attorney Docket Number | MP07 | 96 |
|----------------------------------------|----------------------|-----------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| | | ENCLO | SURES (check all that apply) | | |
| Fee Transmittal F | orm [| ☐ Drawing | g(s) | | er Allowance Communication to chnology Center (TC) |
| Fee Attached | 1 | Licensi | ng-related Papers | | peal Communication to Board of peals and Interferences |
| Amendment / Rep | oly [| Petition | | | peal Communication to TC peal Notice, Brief, Reply Brief) |
| After Final | | | to Convert to a onal Application | Pro | pprietary Information |
| Affidavits/dec | laration(s) | | of Attorney, Revocation e of Correspondence Address | Sta | atus Letter |
| Extension of Time | e Request | Termina | al Disclaimer | Other Enclosure(s) (please identify below): | |
| Express Abandonment Request | | Request for Refund CD, Number of CD(s) | | Statement Under 37 CFR 3.73(b), Change of Power of Attorney, Change of Correspondence Address, and Change of Attorney Docket Nunber; | |
| Information Disclo | osure Statement | | | | Copy of Assignment from Qlogic Corporation to Marvell International Ltd; and postcard |
| Certified Copy of Document(s) | Priority | Remai | fees that may be requ | ired unde | uthorized to charge any additional er 37 CFR 1.16 or 1.17 to Deposit eate copy of this sheet is enclosed. |
| Response to Miss | | • | , 1858ani 116, 65 6766. | , с обрас | ate copy of and sheet is endosed. |
| Response to Parts under 3 1.52 or 1.53 | | | | | |
| | SIGNATI | URE OF A | APPLICANT, ATTORNEY, O | R AGEN | NT . |
| Firm <i>or</i> Individual name | Harness, Dickey & P | ierce, P.L.0 | Attorney Name Donald J. Daley | | Reg. No. 34,313 |
| Signature | | Ql | 11.25 | | |
| Date | 12/2/05 | | 0 | | |



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/619,954

Filing Date:

7/15/2003

Applicant:

Perozo et al.

Title:

System And Method For Transferring Data In

Storage Controllers

Old Attorney Docket: QE1051.US

New Attorney Docket: MP0796

Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

STATEMENT UNDER 37 CFR 3.73(b), CHANGE OF POWER OF ATTORNEY, CHANGE OF CORRESPONDENCE ADDRESS, AND CHANGE OF ATTORNEY DOCKET NUMBER.

STATEMENT UNDER 37 CFR 3.73(b).

Under 37 C.F.R. § 3.73(b), the undersigned hereby states that the below-named Assignee is an assignee in the above-identified Application:

Assignee:

Marvell International Ltd.

Argyle House 41A Cedar Avenue

Hamilton, HM12, Bermuda

The documentary evidence of a chain of title from the original owner to the Assignee Is provided in the Assignment Document(s):

From: Perozo et al.

To: QLOGIC CORPORATION Reel No. 014280 Frame No. 0554.

From: QLOGIC CORPORATION

To: MARVELL INTERNATIONAL LTD.

Filed Herewith.

Page 1 of 2

2. REVOCATION OF PRIOR POWERS OF ATTORNEY.

I hereby revoke all prior powers of attorney in this application.

3. APPOINTMENT OF NEW POWER OF ATTORNEY

I hereby appoint each practitioner at Customer No. **26703** my attorney with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

4. CHANGE OF CORRESPONDENCE ADDRESS

I request the Patent and Trademark Office to direct all correspondence and telephone calls relative to this application to:

Harness, Dickey & Pierce, PLC.
P.O. Box 828, Bloomfield Hills, Michigan 48303
Telephone: (248) 641-1600
Fax: (248) 641-0270

5. CHANGE OF ATTORNEY DOCKET NUMBER

I hereby request the Patent and Trademark Office to change the attorney docket number to MP0796.

The undersigned, whose title is supplied below, is empowered to sign this certificate on behalf of the assignee.

Nov 2 4 2005

Signature: _

Name: (Print) CAROL SCATTERS

Title: (Print) General Maracer

Page 2 of 2

10/619,954

ASSIGNMENT

For valuable consideration, We, Theodore C. WHITE of Rancho Santa Margarita, California and a citizen of United States of America; William W. DENNIN of Mission Viejo, California and a citizen of United States of America; Angel G. PEROZO of Mission Viejo and a citizen of United States of America (hereinafter referred to as "Assignor") hereby assign to QLOGIC, Corporation., a corporation organized and existing under and by the virtue of the laws of the State of Delaware and having a place of business at 26650 Aliso Viejo Parkway, Aliso Viejo, CA 92656, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent filed herewith, U.S. Serial No. entitled SYSTEM AND METHOD FOR TRANSFERRING DATA IN STORAGE CONTROLLERS, and related applications and patents, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, including all divisions, continuations, reissues, continuations-in-part and extensions thereof, and the right to claim priority based on the filing date of said application and based on the filing date of any provisional application of which said application claims the benefit under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and I agree for myself and my heirs, legal representatives and assigns, without further compensation, upon request to perform such lawful acts, to promptly provide Assignee with all pertinent facts and documents relating to said invention or application as may be known and accessible to me, to testify in any interference or litigation related to said invention or application and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

The Assignor hereby covenants that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this Agreement.

| WITNESS my hand at 10:10 am, this 14th day of July , 2003. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Theodore C. WHITE |
| STATE OF <u>California</u>) COUNTY OF <u>Quange</u>) ss |
| On July 14, 2003 before me, Kathleen Tee Ponsigline personally appeared Theodore C. WHITE |
| personally known to me - OR - proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are-subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. |
| WITNESS my hand and official seal. |
| Notary Public in and for sand County and State |
| KATHLEEN TEE PONSIGUONE Commission # 1398049 |

| WITNESS my hand at | 10:06 am |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| this 14th day of July | , 2003. |
| | William W. DENNIN |
| STATE OF California |) |
| STATE OF California COUNTY OF Drings |) ss) |
| personally known to me - the person(s) whose name(s) is/are s he/she/they- executed the same in 1 | or me, Kathleen Technon's personally appeared m W. DENNIN OR - proved to me on the basis of satisfactory evidence to be subscribed to the within instrument and acknowledged to me that his/her/their authorized capacity(ies), and that by his/her/their erson(s), or the entity upon behalf of which the person(s) acted, |
| with 200 my mana and one | |
| 700000000000000000000000000000000000000 | Klonsiglione. |
| KASHLEEN TEE PONSIGLIONE Comparing & 1980049 | Notary Public in and for said County and State |

| WITNESS my hand at | 10:07 | am , |
|---------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| this 14th day of July | | , 2003. |
| | | Angel G. PEROZO |
| STATE OF Celifornia |) | |
| STATE OF Colifornia COUNTY OF Oning |) ss .) | |
| personally known to me - the person(s) whose name(s) is/are su he/she/they executed the same in h | OR - X pro | ved to me on the basis of satisfactory evidence to be the within instrument and acknowledged to me that authorized capacity (ies), and that by his/her/their |
| executed the instrument. | rson(s), or th | ne entity upon behalf of which the person(s) acted, |
| WITNESS my hand and offic | ial seal. | |
| KAPILEEN TEE PONTIG Commission # 1399 Notary Public - Cont | UONE 1049 omla | Notary Public in and for said County and State |

<u>ASSIGNMENT</u>

For valuable consideration, QLOGIC CORPORATION, a Delaware corporation having place of business at 26650 Aliso Viejo Parkway, Aliso Viejo, California, 92656 ("Assignor") hereby assigns to MARVELL INTERNATIONAL LTD., a corporation organized under the laws of Bermuda and having its registered office at Canon's Court, 22 Victoria Street, Hamilton HM 12, Bermuda ("Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are the subject of patents or applications for patent listed in Attachment A, this assignment including said patents and applications for patent, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, any reexaminations, extensions, reissues, continuations, and divisions of said patents and applications for patent, any foreign patent applications related to said patents and applications for patent, and the right to claim priority based on the filing date of said patents or applications for patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; Assignor authorizes the Assignee to apply in all countries in the name of the inventors or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and Assignor agrees for itself, its heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, preliminary statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

> QLOGIC CORPORATION. a Delaware corporation

Anthony J. Massetti Senior Vice President and

Chief Financial Officer

Date: Navember 4, 2005

Attachment A

| | | | 1 | | |
|---------|------------------------------------------------------------------------------------------------------------------|-----------------|-------------|------------|------------|
| Country | Title | Serial No. | Filing Date | Patent No. | Issue Date |
| USA | Cylinder Defect Management System For Data Storage | 07/285,808 | 12/16/1988 | 4935825 | 7/19/1990 |
| USA | Buffer Memory Data Flow Controller | 08/020,058 | 2/19/1993 | 5249271 | 9/28/1993 |
| USA | Method And Apparatus To Determine The Log Of An Element In Gf(2m) With The Help Of A Small Adjustable Size Table | 07/736461 | 7/26/1991 | 5313474 | 5/17/1994 |
| USA | Method And Apparatus For Initializing An ECC Circuit | 07/974,158 | 11/10/1992 | 5428627 | 6/27/1995 |
| USA | System And Method For Generating Unique Sector Identifiers For An Identificationless Disk Format | 08/372,072 | 1/12/1995 | 5627695 | 5/6/1997 |
| USA | Circuit And Method For Rapid Checking Of Error Correction Codes Using Cyclic Redundancy Check | 09/096,709 | 6/12/1998 | 6092231 | 7/18/2000 |
| CA | Circuit And Method For Rapid Checking Of Error Correction Codes Using Cyclic Redundancy Check | 2333386 | 5/27/1999 | | |
| EP | Circuit And Method For Rapid Checking Of Error Correction Codes Using Cyclic Redundancy Check | 925959 | 5/27/1999 | 1090462 B1 | 8/3/2005 |
| JP | Circuit And Method For Rapid Checking Of Error Correction Codes Using Cyclic Redundancy Check | 2000- 551486 | 5/27/1999 | | |

| Country | Title | Serial No. | Filing Date | Patent No. | Issue Date |
|---------|------------------------------------------------------------------------------------------------|--------------------|-------------|------------|------------|
| USA | Systems And Methods For A Disk Controller Memory Architecture | 09/547,567 | 4/12/2000 | 6330626 | 12/11/2001 |
| USA | Method For Context Switching With A Disk Controller | 09/548,330 | 4/12/2000 | 6401149 | 6/4/2002 |
| CA | Systems And Methods For A Disk Controller Memory Architecture | 2370596 | 5/5/2000 | | |
| EP | Systems And Methods For A Disk Controller Memory Architecture | 930436 | 5/5/2000 | | |
| JP | Systems And Methods For A Disk Controller Memory Architecture | 2000615882 | 5/5/2000 | | |
| KR | Systems And Methods For A Disk Controller Memory Architecture | 102001- 7014078 | | | |
| PCT | Systems And Methods For A Disk Controller Memory Architecture | PCTUS0012 433 | 5/5/2000 | | |
| USA | Circuit And Method For Monitoring Sector Transfers To And From Storage Medium | 09/243,295 | 2/2/1999 | 6487631 | 11/26/2002 |
| USA | Disk Drive Controller Circuit And Method For Skipping Defective And/Or Undesired Sectors | 09/326,851 | 6/7/1999 | 6470461 | 10/22/2002 |
| CA | Disk Drive Controller Circuit And Method For Skipping Defective And/Or Undesired Sectors | 2375672 | 6/1/2000 | | |
| EP | Disk Drive Controller Circuit And Method For Skipping Defective And/Or Undesired Sectors | 941177 | 6/1/2000 | | |
| JP | Disk Drive Controller Circuit And Method For Skipping Defective And/Or Undesired Sectors | 2001502120 | 6/1/2000 | | |

| Country | Title | Serial No. | Filing Date | Patent No. | Issue Date |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|------------|------------|
| KR | Disk Drive Controller Circuit And Method For Skipping Defective And/Or Undesired Sectors | 102001- 7015758 | | | • • • |
| PCT | Disk Drive Controller Circuit And Method For Skipping Defective And/Or Undesired Sectors | PCTUS0015 084 | 6/1/2000 | | |
| USA | Methods And Systems For Arbitrating Access To A Disk Controller Buffer Memory By Allocating Various Amounts Of Times To Different Accessing Units | 09/275,629 | 3/24/1999 | 6530000 | 3/4/2003 |
| CA | Arbitration Methods And Systems For Arbitrating Access To A Disk Controller Memory | 2364625 | 3/23/2000 | | |
| EP | Arbitration Methods And Systems For Arbitrating Access To A Disk Controller Memory | 918322 | | | |
| JP | Arbitration Methods And Systems For Arbitrating Access To A Disk Controller Memory | 2000607076 | 3/23/2000 | | |
| KR | Arbitration Methods And Systems For Arbitrating Access To A Disk Controller Memory | 102001- 7012114 | | | |
| PCT | Arbitration Methods And Systems For Arbitrating Access To A Disk Controller Memory | PCTUS0007 780 | 3/23/2000 | | |
| USA | Disk Controller Configured To Perform Out Of Order Execution Of Write Operations | 09/643,636 | 8/22/2000 | 6826650 | 11/30/2004 |
| USA | Disk Controller Configured To Perform Out Of Order Execution Of Write Operations | 10/920,881 | 8/18/2004 | | |

| Country | Title | Serial No. | Filing Date | Patent No. | Issue Date |
|---------|--------------------------------------------------------------------------------------------------------|---------------------|-------------|------------|-----------------|
| EP | Disk Controller Configured To Perform Out Of Order Execution of Write Operations | 958970 | 7/17/2001 | | |
| JР | Disk Controller Configured To Perform Out Of Order Execution Of Write Operations | 2002521285 | 7/17/2001 | | |
| KR | Disk Controller Configured To Perform Out Of Order Execution Of Write Operations | 10-2003- 7002436 | | | |
| PCT | Disk Controller Configured To Perform Out Of Order Execution of Write Operations | PCTUS0122 404 | 7/17/2001 | | |
| USA | Controller For A Disk Drive And Method For Writing Onto And Reading From A Disk | 09/049,157 | 3/26/1998 | | |
| PCT | Controller For A Disk Drive And Method For Writing Onto And Reading From A Disk | PCTUS9906 635 | 3/26/1999 | | |
| USA | Circuit And Method For Rapid Checking Of Error Correction Codes Using Cyclic Redundancy Check | 09/085,765 | 5/27/1998 | | |
| PCT | Circuit And Method For Rapid Checking Of Error Correction Codes Using Cyclic Redundancy Check | PCTUS9911 819 | 5/27/1999 | | |
| USA | System And Method For In-Line Error Correction For Storage Systems | 10/199,911 | 7/19/2002 | 6961877 | Nov-01, 2005 |
| USA | Method And System For Using An Interrupt Controller In An Embedded Disk Controller | 10/384,991 | 3/10/2003 | | |

| Country | Title | Serial No. | Filing Date | Patent No. | Issue Date |
|---------|---------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|------------|------------|
| USA | Method And System For Automatic Time Base Adjustment For Disk Drive Servo Controllers | 10/384,992 | 3/10/2003 | | |
| USA | Method And System For Embedded Disk Controllers | 10/385,022 | 3/10/2003 | | |
| USA | Method And System For Supporting External Serial Port Devices Using A Serial Port Controller In Embedded Disk Controllers | 10/385,039 | 3/10/2003 | | |
| USA | Method And System For Monitoring Embedded Disk Controller Components | 10/385,042 | 3/10/2003 | | |
| USA | Method And System For Using An External Bus Controller In Embedded Disk Controllers | 10/385,056 | 3/10/2003 | | |
| USA | Method And System For Collecting Servo Field Data From Programmable Devices In Embedded Disk Controllers | 10/385,405 | 3/10/2003 | | |
| USA | System And Method For Performing Parity Checks In Disk Storage Systems | 10/429,495 | 5/5/2003 | | |
| USA | System And Method For Transferring Data In Storage Controllers | 10/619,954 | 7/15/2003 | | |
| USA | System And Method For Using Tap Controllers | 10/686,151 | 10/15/2003 | | |
| USA | System And Method For Concatenating Data | 10/761,786 | 1/21/2004 | | |

| Country | Title | Serial No. | Filing Date | Patent No. | Issue Date |
|---------|--------------------------------------------------------------------------------------------------------|------------|-------------|------------|------------|
| USA | Method And System For Head Position Control In Embedded Disk Drive Controllers | 10/793,207 | 3/4/2004 | | |
| USA | Servo Controller Interface Module For Embedded Disk Controllers | 10/796,727 | 3/9/2004 | | |
| USA | Integrated Memory Controller | 10/867,113 | 6/14/2004 | | |
| USA | System And Method For Reading And Writing Data Using Storage Controllers | 10/878,803 | 6/28/2004 | | |
| USA | System And Method For Transferring Data Using Storage Controllers | 10/893,822 | 7/19/2004 | | |
| USA | System And Method For Transmitting Data In Storage Controllers | 10/894,143 | 7/19/2004 | | |
| USA | Dynamic WWN Storage Module For Storage Controllers | 10/894,144 | 7/19/2004 | | |
| USA | System And Method For Controlling Buffer Memory Overflow And Underflow In Storage Controllers | 10/894,208 | 7/19/2004 | | |
| USA | Power Save Module For Storage Controllers | 10/965,468 | 10/13/2004 | | |
| USA | System And Method For Conducting BIST Operations | 10/983,944 | 11/8/2004 | | |
| USA | Method And System For Processing Frames In Storage Controllers | 10/989,060 | 11/15/2004 | | |
| USA | Method And System For Performing CRC | 11/056,320 | 2/11/2005 | | |

| Country | Title | Serial No. | Filing Date | Patent No. | Issue Date |
|---------|------------------------------------------------------------------------------|------------------|-------------|------------|------------|
| USA | Method And System For Read Gate Timing Control For Storage Controllers | 11/099,746 | 4/6/2005 | | |
| PCT | Method And System Embedded Disk Controllers | PCTUS0407 119 | 3/9/2004 | | |